

WHAT IS CLAIMED IS:

1. Saddle pad apparatus adapted to support a saddle while maintaining substantially
5 unimpeded movement of the spinal column of a living subject.

2. The apparatus of Claim 1, wherein said apparatus comprises a plurality of pads
disposed laterally to said spine.

3. The apparatus of Claim 2, wherein said plurality comprises four discrete pads, two
per side of the spine.

10 4. The apparatus of Claim 2, wherein at least one of said pads varies in thickness.

5. The apparatus of Claim 2, wherein at least a portion of said plurality of pads are
formed from a visco-elastic foam material.

6. The apparatus of Claim 2, wherein said plurality of pads are disposed in pockets
formed substantially between a first layer and a second layer of material.

15 7. The apparatus of Claim 6, wherein said plurality of pads are made removable from
said pockets via Velcro strips disposed at seams of said pockets.

8. The apparatus of Claim 6, wherein said first layer and second layer comprise
sheepskin and a fiber-based material, respectively, said sheepskin being disposed to contact the
skin of said living subject, said fiber-based material being disposed to contact said saddle.

20 9. The apparatus of Claim 1, wherein said living subject comprises an equine.

10. The apparatus of Claim 1, wherein said apparatus is further adapted to mitigate
rocking of said saddle back and forth on said living subject during riding.

11. The apparatus of Claim 4, wherein said apparatus is further adapted to mitigate
rocking of said saddle back and forth on said living subject during riding based at least in part on
25 said variation in thickness.

12. A method of riding a living subject, comprising:
placing a saddle pad having a plurality of elements on said subject such that said elements
are disposed substantially laterally to the spinal column thereof;
disposing a saddle substantially atop said pad; and
30 riding said living subject such that said column moves substantially unimpeded under said
saddle and between said elements.

13. The method of Claim 12, wherein said act of placing further comprises placing said pad such that at least one element having a memory is disposed in the forward region of said pad when said pad is placed on said subject.

14. The method of Claim 13, wherein said pad further comprises at least one raised edge portion, and said act of disposing a saddle comprises disposing said saddle such that at least a portion of said saddle cooperates with said raised edge portion to maintain said pad and saddle in substantial alignment during said act of riding.

15. The method of Claim 12, wherein said act of riding comprises:
placing alternating stresses on at least some of said elements; and
responsive to said stresses, selectively compressing ones of said elements so as to maintain a substantially uniform position of said saddle with respect to said subject.

16. The method of Claim 15, wherein said act of selectively compressing comprises resiliently compressing said elements, said resiliently compressing comprising alternating reductions and expansions in thickness.

17. The method of Claim 12, wherein said act of riding comprises:
placing alternating stresses on at least some of said elements; and
responsive to said stresses, selectively compressing ones of said elements so as to substantially prevent said saddle from rocking back and forth with respect to said subject.

18. The method of Claim 17, wherein said act of selectively compressing comprises resiliently compressing said elements, said resiliently compressing comprising alternating reductions and expansions in thickness.

19. Saddle pad apparatus adapted to support a saddle on a living subject during riding such that said saddle is substantially stable around a rotational axis transverse to the longitudinal axis of the spinal column of said subject.

20. The apparatus of Claim 19, wherein said apparatus comprises a plurality of pads disposed laterally to said spine.

21. The apparatus of Claim 20, wherein said plurality comprises four discrete pads, two per side of the spine.

22. The apparatus of Claim 20, wherein at least one of said pads varies in thickness.

23. The apparatus of Claim 20, wherein at least a portion of said plurality of pads are formed from a visco-elastic foam material.

24. The apparatus of Claim 20, wherein said plurality of pads are disposed in pockets formed substantially between a first layer and a second layer of material.

5 25. The apparatus of Claim 24, wherein said plurality of pads are made removable from said pockets via Velcro strips disposed at seams of said pockets.

26. The apparatus of Claim 24, wherein said first layer and second layer comprise sheepskin and a fiber-based material, respectively, said sheepskin being disposed to contact the skin of said living subject, said fiber-based material being disposed to contact said saddle.

10 27. The apparatus of Claim 19, wherein said living subject comprises an equine.

28. The apparatus of Claim 19, wherein said apparatus is further adapted to support said saddle while maintaining substantially unimpeded movement of the spinal column of said living subject.

29. A saddle pad adapted for use with a saddle on an equine, comprising:

15 first and second substantially flexible elements having roughly the same shape, said first and second elements being bound together in at least a plurality of locations along their periphery, said first element being in direct contact with the skin of said equine;

and

20 a plurality of compressible foam pad elements disposed between said first and second flexible elements, said pad elements being disposed within said saddle pad such that the movement of the spine of said equine is substantially unimpeded by said saddle and said pad elements during riding,

wherein substantial weight redistribution of said saddle in a front-back direction is frustrated by said pad elements; and

25 wherein said unimpeded spine movement, said frustration of redistribution, and said first flexible element cooperate to provide reduced discomfort for said equine during said riding.

30. The saddle pad of Claim 29, wherein said first element comprises a thick sheepskin, and said foam elements comprise visco-elastic foam elements.

31. The saddle pad of Claim 29, further comprising at least one peripheral ridge
30 disposed substantially along a front or back periphery of said first and second elements, said

peripheral ridge cooperating with an edge of said saddle to substantially frustrate relative motion between said saddle pad and said saddle in at least one direction during riding.

32. A saddle pad adapted for use, with a saddle, on an equine, comprising:

first and second substantially flexible elements having roughly the same shape, said first
5 and second elements being bound together in at least a plurality of locations along their periphery, said first element being in direct contact with the skin of said equine;

a plurality of compressible foam pad elements disposed between said first and second
flexibly elements, said pad elements being disposed within said saddle pad such that the movement
of the spine of said equine is substantially unimpeded by said saddle and said pad elements during
10 riding,

first and second restraining straps affixed to at least said second flexible element, said straps
each being adapted for substantially concealed tethering to said saddle; and

at least one peripheral ridge disposed substantially along a front or back periphery of said
first and second elements, said peripheral ridge cooperating with an edge of said saddle to
15 substantially frustrate relative motion between said saddle pad and said saddle in at least one
direction during riding.

33. A method of manufacturing a saddle pad, comprising:

providing a quantity of a first material;

providing a quantity of a second material;

20 forming said quantities of said first and second material to a substantially similar shape
to create at least first and second elements;

bonding portions of said first and second elements together to create a plurality of
pockets between said elements; and

disposing one or more compressible pad elements into said pockets.

25 34. The method of Claim 33, wherein said act of forming comprises using a template
to identify where said materials should be cut, and subsequently cutting said materials
substantially according to said template.

35. The method of Claim 33, wherein said at least first and second elements
comprises a first element and complementary second and third elements, and said act of bonding
30 comprises:

bonding each of said second and third elements to said first element; and
selectively bonding portions of said second and third elements to one another, said act of
selectively bonding forming at least one of said pockets.

36. The method of Claim 33, wherein said at least first and second elements
5 comprises a first element and complementary second and third elements, and wherein said act of
bonding to create pockets further comprises interfacing at least portions of said second and third
elements using a Velcro strip.

37. A method of manufacturing a riding pad apparatus, comprising:
providing a first riding pad element having a first shape;
10 providing second and third riding pad elements, said second and third elements having
substantially said first shape when placed in a first relationship;
disposing said second and third elements relative to said first element;
bonding portions of said first, second and third elements to create a plurality of pockets
between various portions of said first and second and said first and third elements; and
15 disposing one or more compressible pads into each of said pockets.

38. The method of Claim 37, wherein said act of disposing said second and third
elements comprises disposing said elements substantially in said first relationship before said
act of bonding is performed.

39. The method of Claim 37, wherein said act of bonding portions of said elements
20 comprises:
disposing said first and second elements substantially in said first relationship;
bonding at least portions of said first and second elements to each other to form a
substantially unitary assembly having said first and second elements in said first relationship;
and
25 bonding portions of said unitary assembly to said first element.

40. The method of Claim 37, further comprising forming at least one of said
compressible pads into a shape.

41. The method of Claim 40, wherein said act of disposing one or more pads
comprises selectively disposing said at least one pad within a first of said pockets, said first
30 pocket being selected in order to utilize said pad to perform at least one function.

42. The method of Claim 41, wherein said at least one function comprises suspending said saddle substantially away from a withers region of an animal.

43. Tilt-inhibiting saddle pad apparatus, comprising:
a body element having a plurality of pockets formed therein;
5 a plurality of pad elements disposed within respective ones of said pockets; and
a contour element disposed within a respective one of said pockets, said contour element having physical properties adapted to cooperate with said pad elements and the anatomy of an animal on which said pad apparatus and a saddle are disposed to maintain said saddle in a substantially constant orientation with respect to said animal.

10 44. A method of operating an animal, comprising:
providing a saddle pad being adapted to interface between a saddle and said animal during use, said interface being variable in at least one aspect;
disposing said saddle pad and said saddle on said animal;
evaluating the sufficiency of said interface; and
15 based at least in part on said evaluating, selectively varying at least one of said at least one aspect.

45. The method of Claim 44, wherein said saddle pad has a plurality of removable pad elements, and said act of selectively varying at least one aspect comprises altering the physical characteristics of at least one of said removable pads.

20 46. The method of Claim 45, wherein said act of altering the characteristics comprises substituting a second removable pad for a first, the two pads having a different thickness profile.

47. The method of Claim 45, wherein said act of altering the characteristics comprises substituting a second removable pad for a first, the two pads having a different
25 density in at least one region thereof.

48. A method of doing business, comprising:
providing a saddle pad to a customer, said saddle pad being having a component, and being adapted to interface between a saddle and an animal during use, said interface being variable based at least in part on said component;
30 disposing said saddle pad and saddle on said animal;

evaluating the sufficiency of said interface; and

based at least in part on said evaluating, selectively varying said component to vary said interface.

49. The method of Claim 48, wherein said component comprises a pad element, and said act of varying said interface comprises changing the thickness of said pad element.

50. The method of Claim 48, wherein said component comprises a pad element, and said act of varying said interface comprises changing the contour of said pad element.

51. The method of Claim 48, wherein said component comprises a pad element, and said act of varying said interface comprises inserting additional pad elements into said saddle pad.

52. The method of Claim 48, wherein said component comprises a pad element, and said act of varying said interface comprises moving said pad element to a different location within said saddle pad.

53. A pad element adapted for use in a saddle pad, wherein said pad element is formed from a substantially resilient material and is adapted for selective removal from said saddle pad by a user.

54. The pad element of Claim 53, wherein said resilient material comprises a visco-elastic foam.

55. The pad element of Claim 53, wherein said pad element has a plurality of densities associated therewith in its uncompressed state.

56. The pad element of Claim 55, wherein said plurality of densities are substantially stratified with respect to the width dimension of said element.

57. The pad element of Claim 53, wherein said pad element further comprises a plurality of substantially rounded edges.

58. The pad element of Claim 53, wherein said pad element is shaped substantially to accommodate a particular artifact on the anatomy of an animal on which said pad element and saddle pad is utilized.

59. A method of limiting weight redistribution within a saddle, comprising: providing a saddle pad having a plurality of pockets formed in the frontal region thereof;

selectively disposing pad elements within respective ones of said pockets, said pad elements adapted to alter the weight distribution of the saddle with respect to an animal on which it is disposed, said alteration substantially mitigating any redistribution in the weight of a rider disposed within said saddle;

5 disposing said pad on said animal;
disposing said saddle on said pad and said animal; and
riding said animal.

60. Apparatus adapted for use on high-withered animals, comprising:
a substantially flexible pad having a plurality of features adapted to capture respective

10 ones of pad elements;
a plurality of pad elements captured by respective ones of said features;
wherein said pad elements and said pad cooperate to raise a frontal portion of a saddle disposed over top of said pad element with respect to a withers region.

61. The apparatus of Claim 60, wherein said pad elements are formed from visco-
15 elastic foam.

62. The apparatus of Claim 61, further comprising a pad interface adapted to interface between said pad and said animal, said pad interface adapted to (i) dissipate localized pressure; (ii) dissipate heat; and (iii) dissipate moisture.

63. A coordinated riding system for use on an animal, comprising:
20 a pad retaining structure;
a plurality of pad elements retained by said structure and adapted to provide a substantially uniform distribution of pressure; and
an interface element disposed between said animal and said pad elements, said interface element being adapted to provide substantial pressure dissipation, moisture dissipation, and
25 thermal dissipation.

64. The system of Claim 63, wherein said retaining structure comprises a saddle pad, and said pad elements comprise visco-elastic foam pads disposed at or near the withers region of said animal.

65. The system of Claim 64, wherein said interface element comprises a sheepskin
30 layer with hair-side disposed facing the hide of said animal.